

IN THE CLAIMS:

In accordance with the Revised Rules under 37 C.F.R. 1.121, please amend the claims as shown below and indicated as “currently amended.” Also shown below are claims that may be indicated as original, previously amended, cancelled, withdrawn, previously added, new, reinstated, previously reinstated, re-presented or allowed. In accordance with the Rules, the text of cancelled or withdrawn claims need not be presented.

1. (currently amended) A device for determining the sheet resistance of samples, in particular wafers and other two-dimensional objects, comprising a means for measuring the conductivity of the sample according to the eddy current technique, wherein the sample is introducible into a gap for measurement, and ~~comprising a means for measuring the position of the~~ sample in the gap for measurement, and a computing means for determining the sheet resistance on the basis of the measured conductivity and of the position of the sample in the gap for measurement.

2. (original) The device according to claim 1, wherein the means for measuring the position of the sample comprises a distance-measuring means which preferably operates in a contactless manner, in particular by means of ultrasound, capacitive or optical techniques.

3. (currently amended) The device according to claim 1 ~~or 2~~, wherein the computing means comprises a memory in which a function is stored which is used in the calculation of the sheet resistance relative to the position of the sample in the gap for measurement.

4. (original) The device according to claim 3, wherein coefficients of the function are stored in the memory which are specifically determined for the set-up of a device.

5. (currently amended) The device according to ~~any one of claims 1 to 4~~ claim 1, wherein the means for measuring the position of the sample acquires the position of the sample at

least at two locations, preferably adjacent to and in particular at both sides of the location of the measurement of the conductivity, wherein preferably a pair of sensors are arranged at each location.

6. (currently amended) The device according to ~~any of claims 1 to 5~~ claim 1, comprising a means for determining the position of at least one of the two surfaces of a sample.

7. (currently amended) A method for determining the sheet resistance of samples, in particular wafers and other two-dimensional objects, comprising the steps of: measuring the conductivity of the sample according to the eddy current technique, wherein the sample is introducible into a gap for measurement, and measuring the position of the sample in the gap for measurement and determining the sheet resistance on the basis of the measured conductivity and the position of the sample in the gap for measurement.

8. (original) The method according to claim 7, wherein the step of measuring the position of the sample comprises a distance-measuring operation which is preferably performed in a contactless manner, in particular by means of ultrasound, capacitive or optical techniques.

9. (currently amended) The method according to claim 7 ~~or 8~~, wherein the step of determining the sheet resistance uses a stored function and comprises a calculation of the sheet resistance relative to the position of the samples in the gap for measurement.

10. (original) The method according to claim 9, comprising the step of using stored coefficients of said function which are specifically determined for the set-up of a device.

11. (currently amended) The method according to ~~any one of claims 7 to 10~~ claim 7, wherein the step of measuring the position of the sample is performed at least at two locations, preferably adjacent to and in particular at both sides of the location of the measurement of the conductivity.

12. (currently amended) The method according to ~~any one of claims 7 to 11~~ claim 7,
comprising the step of determining the position of at least one of the two surfaces of a sample.